

# A Novel Enrichment Program Using Cascading Mentorship to Increase Diversity in the Health Care Professions

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## Abstract

The authors describe an innovative summer enrichment program based on a cascading mentorship model to transfer knowledge and skills from faculty to medical students to undergraduate students and finally to high school students. The program was designed to give high school students a glimpse of life in medical school and enhance the teaching and leadership skills of underrepresented undergraduate and medical students. Started in 2010 with 30 high school students and 9 college and medical student coaches,

the University of California, Irvine, School of Medicine Summer Premed Program expanded rapidly over the next two summers and enrolled a total of 253 high school students, 48 college students, and 12 medical students. The college and medical student coaches, the majority of whom were underrepresented in medicine (URIM), reported that the program enhanced their teaching and leadership skills and self-confidence, motivated them toward careers in academic medicine, and raised their awareness about the importance

of cultural diversity. The authors present the details of this interactive, structured program and describe how URIM student empowerment, near-peer teaching, science socialization, and support from the institution's leadership and faculty members provided a climate that fostered belonging, a sense of personal transformation, and professional development among students from different levels of education and diverse backgrounds. Long-term follow-up of the participants' career choices is needed.

**M**inority student enrollment in colleges and medical schools has been fluctuating over the last decade,<sup>1-3</sup> and underrepresented minorities still make up a disproportionately small percentage of medical school applicants, matriculants, and faculty physicians relative to their representation in the general U.S.

Although the majority of underrepresented-in-medicine (URIM) and women premedical students are academically well prepared, they are less than half as likely as non-URIM students to continue their interest in medicine and apply to medical school.<sup>4,5</sup> The "leaky pipeline" in health professions education has been attributed to the structure of science courses, lack of peer and faculty support, absence of high-quality advisors,<sup>4</sup> negative experiences in college,<sup>6</sup> lack of career planning and networking opportunities,<sup>7</sup> and a disconnect between diversity and the core mission of the organization in achieving excellence.<sup>8</sup> Several medical schools have developed a number of pipeline initiatives from kindergarten to medical school to attract more minority students to the medical profession. However, there is an urgent need to deliver innovative programs that address persistent challenges and expand on what has been initiated.

important, enrichment programs must create environments that assist students with making the social and intellectual transitions to college, professional school, and career advancements in academic medicine. To succeed, minority students must experience reduced social and cultural isolation in an environment that cultivates diversity.

Enrichment programs with interactive school activities and inspirational staff have been shown to garner student interest in health professions,<sup>10-12</sup> whereas negative social experiences, lack of economic resources, absence of role models,<sup>6</sup> perception of discrimination, and lack of empowerment or inclusion<sup>13,14</sup> discourage students from entering health sciences or choosing academic medicine as a career.<sup>13,15</sup> The failure to attract and retain minority youth towards health care careers continues to be challenging.<sup>3</sup>

### "Cascading" mentorship

Peer-assisted mentorship has been effective in making students better learners and teachers.<sup>16,17</sup> As students advance in their training toward becoming physicians, teaching their peers (peer-to-peer) or underclassmen (near-peer) becomes a major component of their daily activities. Therefore, development of effective teaching and

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leadership skills during early stages of education is crucial.<sup>18</sup>

Peer teaching of more junior medical students by senior medical students or residents is prevalent across academic institutions.<sup>17</sup> However, there are few examples in the literature of peer mentoring using a “cascading” model starting with faculty and ending with high school students and including a focus on the professional and personal development of students. In addition, negotiation of power or sharing of control between the educator and students has been described as an effective intervention for the academic success of minority students.<sup>14</sup> Although the beneficial outcomes of this kind of student empowerment have been described at lower levels of education,<sup>19</sup> there are no reports evaluating the effect of empowerment in a program that includes URIM students at several different levels of education. Based on a cascading mentorship model, the University of California (UC), Irvine, School of Medicine’s Summer Premed Program was established to address the deficit in scientific socialization for the URIM students and enhance the leadership and teaching skills of college and medical students.

### **The Summer Premed Program**

#### **Program development**

The Summer Premed Program resulted from a collaboration among three School of Medicine entities: the Latino Medical Student Association (LMSA), the Department of Urology, and the Center for Future Health Professionals. These entities provide various youth outreach programs to the community and share a common overarching mission of stimulating the interest of URIM youth towards health professions. The three outreach programs are run by volunteer faculty members and students who shared a common passion for increasing diversity in health care fields. Because of limited resources available to run these outreach programs, the dean of the School of Medicine suggested that these three groups collaborate to develop an innovative program that would address their shared mission.

In April 2010, we, the representatives from the three groups, met for the first

time and discussed the creation of a self-sustaining summer program with the goals of promoting the interest of high school students towards health professions while enhancing the professional development of URIM premedical and medical students toward careers in academic medicine. We decided on a cascading mentorship model in which the high school students are coached by premed undergraduate students, who are in turn mentored by medical students, who are mentored by faculty. The cascading mentorship model had been used in some of our outreach programs and had proven to be effective.

Thereafter, we held weekly meetings that included at least two medical students (members of LMSA), the director of the Center for Future Health Professionals (B.A.), the senior clinical research coordinator for the Department of Urology (R.S.), and a member of the Urology Leadership Council who represented the community (W.M.). By our third meeting, we had created the application, the program agenda, and a Web site for the program. We received approval from the dean to start the application process in early May 2010, about three weeks after our first meeting.

#### **Application process**

We enrolled 30 high school students for the first session in summer 2010. The enrollment fee was \$1,950 per student for a two-week program, and we decided to offer scholarships (free enrollment) to 10% of the students who belonged to an underrepresented group and did not have the resources to pay the tuition. Following the suggestion of the leadership, during the next two sessions (2011 and 2012), we increased the scholarship offerings to 25% of applicants who met the enrollment criteria.

Because one of our goals was to garner the interest of URIM premedical and medical students towards academic medicine, we decided to target URIM coaches. In recruiting our coaches, we defined “URIM” as those who showed a special interest in studying health disparities and serving the vulnerable populations or who belonged to a population underrepresented in the medical profession relative to their numbers in the local population.<sup>1,3,20</sup> Because the high school students were

not certain of their future interests, they were included in the URIM category if they were underrepresented because of their socioeconomic status or belonged to a population underrepresented in the medical profession. Coaches received a stipend of \$300 (for college students) to \$500 (for medical students) per session. The enrollment fees were used to pay the stipends.

The enrollment criteria were rigorous for both high school students and undergraduate coaches. We required a GPA of more than 3.5 for high school students and more than 3.0 for URIM premedical students, an essay regarding their motivation to attend medical school, and a teacher’s recommendation letter.

#### **Recruitment**

During the first year, the members of our committee informed some of the high school science teachers and principals in Orange County, California, about the program. During the subsequent years, the majority of our applicants who applied had a friend or family member who had completed the program. Students from outside California and the United States found out about the program through friends/family or through researching summer programs on the Internet. For URIM high school students, we had established links with several underserved high schools through our three different outreach programs. Therefore, it was easy to advertise the program through different meetings or contacts with high school administrators. The majority of the coaches were URIM and were recruited through the efforts of the medical student members of our committee who belonged to LMSA or had an interest in serving the underserved populations. Table 1 shows the demographic characteristics of the high school students and the coaches.

#### **Program agenda**

The program was carried out mainly at the Medical Education Building in Irvine where the classes for medical students are held. The students also spent two days at UC Irvine Medical Center in Orange, California. Interactive workshops and didactic lectures given by prominent faculty and leaders in the School of Medicine occupied a major part the curriculum. See Table 2 for details.

Table 1

**Gender and Underrepresented in Medicine (URIM) Status of Participants in the University of California, Irvine School of Medicine Summer Premed Program, 2010–2012**

Participant group	URIM		Non-URIM	
	Male, no. (%)	Female, no. (%)	Male, no. (%)	Female, no. (%)
Medical students (n = 12)	5 (42)	6 (50)	1 (8)	0 (0)
Undergraduate students (n = 36)	4 (11)	17 (48)	2 (5)	13 (36)
High school students (n = 253)	21 (8)	35 (14)	80 (32)	117 (46)

To engage the high school students' families in their professional development, we invited the parents to the opening and closing ceremonies.

During the opening ceremonies, after a description of the program, each high school student walked across the stage and received a short white coat from the program director and the associate dean of student affairs at UC Irvine School of Medicine. The closing ceremonies featured a keynote speech regarding the characteristics of a model physician and the importance of diversity and translational research. Each student received a certificate of completion.

#### Cascading mentorship in the Summer Premed Program

We designed the daily activities with a specific reporting and teaching structure. In general, we assigned one premed undergraduate or postgraduate coach for a group of five high school students, and one medical student coach for two or three undergraduate coaches. Below is a description of the cascading mentorship nature of this program.

**Faculty.** During each two-week session, a total of 8 to 9 academic faculty members participated in the program on a volunteer basis, providing advice and networking opportunities and motivating the students to accomplish their goals. All faculty members who participated are known as excellent teachers and hold leadership positions at the UC Irvine School of Medicine. An additional 8 to 10 staff members, including nurses and other health care professionals, helped with some of the workshops, including vital signs, IVs, simulation, suturing, and bedside ultrasound. Most of these staff members were reimbursed for their time and efforts.

The program director (B.A.) was present during the majority of the sessions, and

under her guidance, URIM medical students coached college students, who in turn coached a diverse population of high school students.

**Medical students.** Three medical students participated during each two-week session. A total of 12 medical students participated during the 2010–2012 summers, and of those, 7 took part in more than one session. Eleven of 12 medical students were URIM; 9 were Hispanic and 2 were African American (see Table 1). Some of the medical students were involved in recruiting high school students and undergraduate coaches and took part in reviewing and ranking the applications. Medical students played an active role in the creation and execution of the course material, such as interactive talks and workshops. They nominated faculty speakers on the basis of excellent teaching records, recommended workshops for the program, and coached the undergraduate and high school students in various activities. For example, during the gross anatomy laboratory, each medical student was responsible for creating course material and demonstrating an organ system to each student group. They also helped the college students guide the high school students in completion of patient projects and provided guidance and resources regarding the application process to medical school. Medical students served as role models for college students with similar personal and cultural backgrounds.

**College students.** A total of 36 undergraduate or postgraduates (6–8 per two-week session) participated in the program (see Table 1). Of the 36, 21 (59%) were URIM (19 Hispanic, 1 African American, 1 Filipino). The college student coaches provided

guidance to the high school students or took part in execution of workshops. For example, after training by the program director, they took on roles as standardized patients while the high school students performed patient interviews under the supervision of the faculty. In addition, each high school student group interviewed their assigned patients in the hospital and, with the guidance of their undergraduate and medical student coaches, determined the patient's ailment. The coaches were readily available during lunch time and breaks and provided advice as needed regarding high school students' future plans. The majority of high school students have kept in touch with their coaches and the director of the program and continue to get advice.

**High school students.** A total of 253 high school students participated in the summer programs, 30 during one session in 2010, 80 during two sessions in 2011, and 143 during three sessions in 2012. Of 253 students, 56 (22%) were URIM (48 Hispanic, 6 African American, 2 Filipino). The high school students were expected to take part in all of the hands-on activities and to work as teams to complete a project under the guidance of faculty and coaches. They were encouraged to ask questions, find networking opportunities, and reflect on their experiences.

#### Program preparation

Prior to the start of each session, the undergraduate and medical student coaches attended a two-hour workshop conducted by the program director. The coaches received an overview of the program and a detailed agenda. They gave suggestions regarding the execution of the program and, in addition to the expected responsibilities, they were empowered to be creative and come up with activities to make the program more engaging. For example, the college student coaches were given the task of creating and executing the icebreaker activities for the first day of the program.

In addition, coaches reviewed agenda items at the beginning and the end of each day to ensure proper execution of the agenda and provided feedback on the activities. The coaches reflected on their positive and negative experiences and

Table 2

**Program Agenda Details, University of California, Irvine School of Medicine, Summer Premed Program, 2010–2012**

Section title	Didactic component	Hands-on component
Patient interviews	Basics of taking a history and reaching a diagnosis based on history and physical exam as well as diagnostic studies	The students were divided into groups and interviewed a hospitalized patient under direct supervision of medical students, residents, and faculty.
Group projects	Importance of evidence-based medicine and literature search	Each group made a formal presentation on the epidemiology, clinical manifestations, pathophysiology, treatment, and prevention of their patient's illness. The coaches played an integral part in guiding the high school and undergraduate students regarding medical terminology and doing an advanced literature search.
Reflective art	Importance of reflective art in medicine	A piece of reflective art in the form of a poem, video, logo, or drawing was included in each group's presentation.
Cadaver laboratory	Importance of different organ systems in the body	The students rotated through different stations. The medical students discussed the anatomy and function of different organ systems, including the heart, lungs, digestive system, head, and musculoskeletal system. A radiology station that included the x-ray, CAT scan, and MRI scan was also included.
Vital signs and intravenous (IV) line workshop	Importance of vital signs in patient assessment	The students practiced measuring the pulse, respiratory rate, temperature, and blood pressure and practiced putting an IV line using an IV training simulator.
Patient simulation	Use of innovative technologies as teaching tools	Under the supervision of faculty, staff, and medical students, the students practiced intubation, central line placement, basic life support, and case studies using human patient simulators.
Laparoscopic/robotic surgery and suturing	Applications of innovative technologies in surgery	Students had the opportunity to tie a surgeon's knot using the da Vinci Robot and pelvic trainer. They also practiced suturing techniques using pig's feet.
Nutrition and physiology laboratory	Nutrition and exercise physiology	Under the direction of the exercise physiologist and bionutrition research manager, students engaged with human performance testing and analysis.
Splinting and casting	Applications of casting and splinting in basic fractures	Under the supervision of an orthopedist and coaches, the students practiced putting splints on each other.
Portable ultrasound	Applications of ultrasound in diagnosis of certain diseases	Through hands-on experience, the students learned to scan and identify various structures in organs, such as the heart, kidneys, liver, eyes, and the bowel.
Standardized patient interviews	Importance of patient doctor communication and empathy	Groups of students interviewed a standardized patient. Each interview was followed by feedback by faculty members.
An ideal physician	Qualities of an ideal physician and the rewards and challenges to maintain a successful work-life balance	N/A
Medical school and nursing school	Application process and requirements to enter medical school and nursing school	N/A
Life in college and medical school	Personal stories about life in college and medical school by the coaches	N/A
Medical ethics	Case discussions on ethical dilemmas	N/A
Professionalism	Construct of professionalism in medicine and practical tools regarding communication skills, appearance and importance of teamwork	N/A
Health disparities and cultural diversity	Influence of various cultural beliefs about illness	N/A
Different specialties in the field of health care	Processes involved in specializing in different fields of health care and personal stories of work-life challenges	N/A

ways to improve the program. We used the coaches' feedback to make changes in subsequent sessions. For example, in 2011 the coaches suggested that we have the didactic talks in the mornings rather than after lunch, and we followed this model for the 2012 sessions.

**Program Outcomes**

The Summer Premed Program started in the summer of 2010 and was full within two months of announcing its opening, indicating an intense demand for such a program. Because of the popularity of the program, we held two 2-week sessions

during summer of 2011 and three 2-week sessions during the summer of 2012. We increased our enrollment from 30 high school students in 2010 to a total of 80 students (40 each session) in 2011 and a total of 143 in 2012 (40 in session I, 44 in session II, and 59 in session III).

Table 3

**Coaches' Ratings of the Effect of the Program on Their Professional Development University of California, Irvine School of Medicine Summer Premed Program, 2010–2012**

Category	Average rating (standard deviation)*	
	Undergraduate students, N = 34	Medical students, N = 12
Self-confidence	4.64 (0.65)	4.42 (0.51)
Motivation for a career in academic medicine	4.82 (0.46)	4.50 (0.65)
Understanding different cultures	4.62 (0.60)	4.33 (0.67)
Leadership abilities	4.74 (0.45)	4.67 (0.49)
Teaching abilities	4.88 (0.33)	4.75 (0.45)
Serving the underserved	4.76 (0.43)	4.50 (0.80)

\*Participants rated each category on a 5-point scale: 1 = significantly decreased, 5 = significantly increased. All of the 12 medical students and 34 of 36 college students completed the survey.

As shown in Table 1, 22% of the 253 high school students and 67% of the 48 coaches were URIM (Hispanic, African American, or Filipino). Seven (58%) medical students and 15 (42%) college coaches participated in more than one session.

#### Program evaluation

At the conclusion of each day, we distributed an anonymous form to evaluate the effectiveness of lectures and workshops for that day. Once the high school students left for the day, the medical student and undergraduate coaches conducted a 15-minute debriefing session to discuss the events of the day, prepare for the next day, and problem-solve any issues regarding the course or any other difficulties that may have arisen. To further assess the overall outcomes, the high school students and coaches completed an anonymous questionnaire at the end of each two-week session. The questionnaire consisted of two open-ended questions regarding any positive and negative opinions about the program and a quantitative survey to gauge the high school, college, and medical students' perceptions of their professional development and changes in their attitudes as a result of the program. The survey was approved by the UC Irvine institutional review board.

#### College and medical student coaches

In this report, we summarize our findings on the effect of the program on the development of the coaches, the majority of whom were URIM. The qualitative feedback suggested that the program stimulated significant changes in the

attitudes and abilities of the coaches. They repeatedly acknowledged several factors that contributed to the success of the program.

First was a sense of empowerment through near-peer mentorship and sharing of control that

gave me the opportunity to be creative as a mentor for a smaller group of students who I got to know really well and will keep in contact with. It also allowed me to interact closely with doctors who are great mentors and do a lot for the community as I aspire to do in the future.

The second factor was effective and passionate role models: "It is inspiring to work with passionate role models who share my cultural background." Finally, coaches cited an interactive and supportive learning environment that gave them a sense of personal transformation: "Students and faculty are all very supportive of one another and create an environment where everyone, students and mentors alike, feels welcomed." Several coaches commented that after the completion of the program, they were more motivated to go back to school and finish their studies with the hope of giving back to the community as physicians and mentors.

The results of the quantitative survey regarding the impact of the program on the coaches' attitudes, abilities, and future plans are summarized in Table 3. The coaches reported that their self-confidence, leadership, and abilities increased and they became more aware of the importance of cultural diversity

and serving the underserved population. We also included open-ended questions regarding the impact of the program and ways to improve the program. The main comment on how to improve the program was to "spread out the lectures and workshops throughout the day" and provide opportunities for room and board. A room and board option was offered during one of the 2012 sessions, and 24 students enrolled.

#### High school students

The high school students' perceptions of the program and different workshops will be described in detail in another article. In summary, the high school students experienced an extraordinary array of resources, outstanding teachers, and a feeling of privilege to be part of the program. Several high school students commented that the program encouraged them to learn about and become more aware of different perspectives from different cultural backgrounds.

#### Discussion

We describe a novel pipeline program based on a cascading mentorship model in which faculty, medical students, and undergraduate students shared their experience and knowledge through interactive workshops and group projects with a cohort of high school students. Our program promoted the interest of youth towards a career in health care professions and also enhanced the professional development of medical students and college students. The medical and undergraduate students felt that the summer program was very effective in increasing their confidence, improving their teaching and leadership abilities, and raising awareness about the importance of cultural diversity and community engagement. Although near-peer mentorship of high school students by medical or college students has proven to be an effective method of learning and teaching,<sup>12</sup> there is a lack of literature on the effectiveness of a structured cascading mentorship program in medical education involving more than two educational levels.

A major component of our program was based on interactive group projects led by the URIM undergraduate and medical student coaches. Comfort in the learning environment through near-peer teaching has resulted in important educational

outcomes in several studies.<sup>17,21</sup> By having mentors and students close in age, we reduced the cognitive distance and provided a more comfortable educational environment in the Summer Premed Program. We were able to address some of the deficits in “asset bundles” as proposed by Johnson,<sup>15</sup> including low expectations about academic ability, fear of antagonism from the dominant group, low visibility of others with similar backgrounds, and less developed networks.

Our program provided networking opportunities through contact with medical students and a diverse group of distinguished faculty who provided information about the application process for college and medical school as well as networking opportunities to increase student commitment towards success. Having had contact with a physician during the first two years of college seems to have a positive influence on students’ levels of interest in pursuing careers in medicine.<sup>4</sup> In addition, the workshops and sessions led by faculty members with diverse backgrounds offset the perceived prejudice and discrimination that could act as one of the deficits in “asset bundles.”<sup>15</sup> The confidence and self-esteem acquired through these interactions may well encourage the students to follow their dreams of becoming health care professionals.

By providing free enrollment to talented, low-income students and stipends to the coaches, we alleviated the financial burden that may have otherwise prevented them from participating in our program. As a public institution it is part of our mission to make all offerings in our school of medicine available to students regardless of their fiscal situation.

Similarly, a number of studies have emphasized the need to prepare physicians in their future role as educators.<sup>13,15</sup> This has led to a number of initiatives to train medical students and residents as teachers.<sup>16–18</sup> The Summer Premed Program is unique in that it goes farther to provide a cascading mentorship model that incorporates teaching and learning in the early stages of medical education, which has not been described previously. By facilitating group projects and leading discussions, the medical and undergraduate student coaches reported that their confidence had increased, which allowed their leadership and

teaching skills to develop further towards careers in academic medicine.

We believe that a major factor in the success of our program was empowering the medical and college students in the planning as well as the implementation phase of the program. The feedback we collected from our evaluations is consistent with assumptions in Cummins<sup>14</sup> theory on empowerment of minority students. Widespread school failure does not occur in minority groups who are positively oriented toward both their own and the dominant culture, do not perceive themselves as inferior to the dominant group, and are not alienated from their own cultural values. Students who are empowered by their school experiences develop the ability, confidence, and motivation to succeed academically. They participate competently in instruction as a result of having developed a confident cultural identity as well as appropriate school-based knowledge and interactional structures.<sup>14</sup> In the Summer Premed Program, the coaches were empowered by sharing power with the faculty educators. Further, the high school students gained an understanding of diversity by acknowledging the cultural and intellectual resources offered by their URIM coaches.

Common to both our program and Cummins<sup>14</sup> theory is the importance of the collaborative and reciprocal nature of ways faculty, coaches, and high school students negotiate identity, power, and knowledge. Another commonality is the importance of clarity of role sharing. Cummins<sup>14</sup> asserts that educators must redefine their roles within the classroom so that the new roles result in interactions that empower rather than disable students. Empowering coaches by giving them mentorship opportunities was a recurrent theme in the feedback evaluations of our program. In fact, several of the high school students and coaches who participated during the first summer session returned to be coaches during the following summers. By empowering URIM students at different stages of the pipeline to be leaders and teachers, institutions strengthen their ability to diversify the field of academic medicine over time.

There have also been a few challenges with the implementation of the Summer Premed Program. First, as the program grows, the expenses for the program

will increase. For the first session, the director and the coordinator of the program worked on a volunteer basis to organize and implement the program. For the subsequent years, we had to train a different coordinator each year, and the other job responsibilities of the coordinator took priority over the organization of the Summer Premed Program. As the program has grown, the need for a dedicated coordinator and protected time for the director has become more evident. Second, because the program is in the early stages, we are unable to study the career outcomes of our students at this time. Long-term follow-up of our students to assess outcomes will be possible in another two years as the first class begins to graduate college. Finally, we have a long waiting list, especially for URIM students who request scholarships. Because of the expenditures for the program, we cannot offer scholarships to more than 25% of the high school students. In addition, although we added a room and board option during one of the 2012 sessions, offering this option to scholarship students would increase our costs even further. To address the challenge of accessibility and affordability for disadvantaged students, we are looking for partnership opportunities with community organizations and foundations who share our mission of increasing diversity in health care.

Our program was short, and the immediate beneficial effects reported by participants were based on self-perception. In addition to a quantitative evaluation, we asked open-ended questions about both positive and negative experiences, and we suspect that the intensity of the participants’ positive experiences overshadowed any negative experiences during the program. Follow-up studies are needed to determine the influence of our program on long-term workforce outcomes, such as professional development as future teachers and leaders and preparedness for medical school and residency.

Finally, we must acknowledge that the support of the dean to involve distinguished faculty mentors and to provide the facilities in the Medical Education building was instrumental in the success of our program. Similar programs would be successful at other schools whose leadership and

organizational culture demonstrate a strong commitment to increasing diversity.

## Conclusions

The Association of American Medical Colleges (AAMC) has announced promoting diversity in health care fields as one of its strategic priorities.<sup>8</sup> To increase diversity in medical education and to advance health care equity in the United States, the AAMC highlights the need for summer enrichment programs that diversify the applicant pool and encourage more URIM groups to consider medicine as a career. Aligned with this AAMC core value, our Summer Premed Program promotes an inclusive climate by providing academic and social support to students at different levels of education and from a variety of backgrounds using a cascading mentorship approach. Such programs with broadening experiences that nurture a climate of belonging, education, and respect among students from various ethnic backgrounds, socioeconomic statuses, religions, and ages are needed. The presence of a diverse group of coaches and a very diverse student body were powerful tools in increasing the awareness of the students towards the importance of diversity and giving a sense of empowerment to the coaches. We believe that the Summer Premed Program is an innovative strategy to support diversity initiatives in the medical education pipeline in a climate where funding is a challenge to secure. Furthermore, the replication of this program in other institutions could provide important tools to repair “leaky pipelines” and encourage a larger population of youth at different levels of education to succeed in a heterogeneous and ever-changing society.

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